

ABSTRACT

The present invention provides a plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag or Cu are formed on a surface of the first plate facing the second plate, and the surface is covered with a dielectric layer covering the display electrodes, where the dielectric layer is made of a glass that contains at least ZnO and 10 wt% or less of R_2O and does not substantially contain PbO and Bi_2O_3 , and a product of permittivity ϵ and loss factor $\tan\delta$ of the dielectric layer is 0.12 or less, where R is selected from a group consisting of Li, Na, K, Rb, Cs, Cu, and Ag. The plasma display panel effectively prevents display performance from deteriorating by suppressing deposition of colloidal particles of Ag and Cu out of the display electrodes into the dielectric layer. The plasma display panel consumes a small amount of power since the product of permittivity ϵ and loss factor $\tan\delta$ of the dielectric layer is lower than conventional ones. Also, the manufacturing cost of the plasma display panel is reduced due to reduction in the cost for baking the dielectric layer or the like which is achieved since the softening point of the glass with the above composition is 600°C or less, lower than conventional ones.